

IN THE CLAIMS:

1. (Previously amended) An EMI-shielding riser card comprising at least six stacked adjoining layers:

at least three ground layers;

at least one power layer; and

at least two signal layers, at least one of the at least two signal layers including a via formed therein;

a trace on a surface of the at least one signal layer including the via, the trace running through the via;

wherein the EMI-shielding riser card is a flat sheet of layered material shaped to fill an opening between two compartments of a computer enclosure, thereby dividing the computer enclosure into an EMI source compartment containing a source of EMI and an unshielded compartment containing a device, wherein the trace is in electrical communication with the EMI source and the device, and wherein at least one of the at least three ground layers is positioned to be interposed between the EMI source compartment and the at least two signal layers, and to cover the via and substantially all of the trace that is in electrical communication with the device in the unshielded compartment when the riser card is mounted in the computer enclosure.

2. (Original) The EMI-shielding riser card of Claim 1, the riser card is configured for an NLX system.

3. (Original) The EMI-shielding riser card of Claim 1, wherein the at least three ground layers are configured to connect to a ground connection of a computer system.

4. (Original) The EMI-shielding riser card of Claim 1, wherein the riser card is rectangular.

5. (Original) The EMI-shielding riser card of Claim 4, further comprising a through hole for mounting to a frame adjacent to each of four corners of the riser card.

6. (Original) The EMI-shielding riser card of Claim 1, further comprising at least one peripheral port socket on a first surface of the riser card configured to face the unshielded compartment

7. (Original) The EMI-shielding riser card of Claim 1, further comprising at least one connector on a second surface of the riser card configured to face the EMI source compartment.

8. (Original) The EMI-shielding riser card of Claim 6, further comprising at least one connector on a second surface of the riser card configured to face the EMI source compartment.

9. (Original) The EMI-shielding riser card of Claim 6, further comprising a plurality of vias through at least one layer of the riser card for connecting at least one signal layer to the at least one peripheral port socket.

10. (Original) The EMI-shielding riser card of Claim 7, further comprising a plurality of vias through at least one ground layer for connecting at least one signal layer to the connector.

11. (Original) The EMI-shielding riser card of Claim 8, further comprising a plurality of vias through the at least six stacked adjoining layers for connecting the connector to the at least one peripheral port socket.

12. (Previously added) A riser card configured to be positioned within a computer enclosure containing a system board, the computer enclosure defining a source compartment and an unshielded compartment therein, comprising:

- a ground layer;
- a signal layer operably coupled to the ground layer;
- a connector adjacent to an edge of the riser card;
- a cable connection socket on the riser card a first distance away from the connector; and,

- a trace on a surface of the signal layer, the trace running between the connector and the cable connection socket,

- wherein the ground layer is configured to be positioned within the enclosure between the source compartment and the unshielded compartment, and wherein the connector is configured to connect the riser card to the system board so that the riser card is substantially orthogonal to the system board, and wherein the signal layer and the ground layer are arranged such that, when the riser card is positioned within the computer enclosure, the ground layer is interposed between the source compartment and the signal layer so that the ground layer covers substantially all of the trace.

13. (Previously added) The riser card of Claim 12, wherein the cable connection socket faces the unshielded compartment, when the riser card is positioned within the enclosure.

14. (Previously amended) The riser card of Claim 12, wherein the riser card includes a via formed therein, the trace running through the via, wherein the ground layer is positioned to cover the via and substantially all of the trace that is connected to the cable connection socket.

15. (Previously added) The riser card of Claim 12, wherein the riser card includes a plurality of ground layers, a power layer, and a plurality of signal layers, one of the plurality of ground layers being interposed between the plurality of signal layers and the source compartment, when the riser card is positioned within the enclosure.

16. (New) The riser card of Claim 12, wherein the signal layer is physically connected to the ground layer.

17. (New) The riser card of Claim 16, wherein the signal layer is connected to the ground layer by way of a non-conductive material.

18. (New) The riser card of Claim 16, wherein the signal layer is in electrical communication with the ground layer.

19. (New) The riser card of Claim 18, wherein the signal layer is connected to the ground layer by way of a resistor.